

In The Claims:

5 1. (Not Amended) A method in a satellite positioning system receiver, comprising:
determining an estimated location of the receiver at the receiver;
transmitting the estimated location to a network;
receiving from the network altitude information based upon the
estimated location of the receiver;
determining a new location of the receiver at the receiver based
upon the altitude information received from the network.

15 2. (Not Amended) The method of Claim 1, determining the estimated location of the receiver based upon a coarse altitude of the receiver.

20 3. (Once Amended) The method of Claim 1, determining a derived altitude based upon the estimated location of the receiver, the altitude information from the network including a reference altitude, determining the new location of the receiver if a difference between the derived and reference altitudes is outside an altitude threshold.

25 4. (Not Amended) The method of Claim 2, requesting and receiving the coarse altitude from the network.

5. (Not Amended) The method of Claim 1, receiving at the receiver terrain slope estimates at the estimated location from the network, determining the new location at the receiver based upon the altitude information and terrain slope estimates received from the network.

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cont.
10 6. (Once Amended) A method in a satellite positioning system receiver, comprising:

determining an estimated location of the receiver;

determining a reference altitude of the receiver based upon the estimated location of the receiver;

15 determining a new location of the receiver based upon the reference altitude.

20 7. (Not Amended) The method of Claim 6, determining the reference altitude of the receiver by using the estimated location to index the reference altitude in a map database.

25 8. (Not Amended) The method of Claim 6, determining the estimated location of the receiver based upon a coarse altitude of the receiver.

5 9. (Once Amended) The method of Claim 7, determining a derived altitude from a 3-dimensional estimated location of the receiver, determining the new location of the receiver if a difference between the derived altitude and the reference altitude of the receiver is outside an altitude threshold.

10 10. (Once Amended) The method of Claim 6, determining the new location at the receiver based upon the reference altitude of the receiver and terrain slope information for the estimated location.

15 11. (Once Amended) The method of Claim 6, determining the reference altitude of the receiver based upon the estimated location of the receiver and based upon 3-dimensional location fix altitude information.

20 Cancel Claim 12 without prejudice.

25 13. (Once Amended) The method of Claim 6,
determining the estimated location with a coarse altitude,
determining the reference altitude and terrain slope information at
the estimated location,
updating the estimated location with the reference altitude and
the terrain slope information.

14. (Once Amended) The method of Claim 6,
determining the estimated location with a coarse altitude,
determining the reference altitude with terrain slope information
in the vicinity of the estimated location.

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15. (Once Amended) A satellite positioning system receiver
location method, comprising:
determining, at the receiver, an estimated location of the receiver;
transmitting the estimated location of the receiver to a network;
determining a reference altitude of the receiver at the network
based upon the estimated location of the receiver;
determining a new location of the receiver based upon the
reference altitude of the receiver.

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16. (Not Amended) The method of Claim 15, determining the
reference altitude of the receiver by using the estimated location to index the
reference altitude of the receiver in a map database on the network.

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17. (Not Amended) The method of Claim 15, determining the
estimated location of the receiver based upon a coarse altitude of the receiver.

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18. (Once Amended) The method of Claim 17, determining the new location of the receiver only if a difference between the coarse and reference altitudes is outside an altitude threshold.

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19. (Not Amended) The method of Claim 18, determining the new location of the receiver at the network.

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20. (Once Amended) The method of Claim 15,
the estimated location is a 3-dimensional location fix, determining
a derived altitude from the estimated location,
transmitting satellite information used to determine the 3-
dimensional location fix of the receiver to the network,
15 determining a difference between the derived altitude and the
reference altitude, determining a corrected location of the receiver based upon
the satellite information and the difference.

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21. (Once Amended) The method of Claim 20, transmitting
weighting factors used to determine the estimated location of the receiver to
the network, determining a corrected location of the receiver based upon the
satellite information, the weighting factors, and the difference between the
derived altitude and the reference altitude at the network.

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Add the following new Claims:

5 22. (New) The method of Claim 6, the estimated location is a previously generated 3-dimensional location of the receiver, computing a derived altitude from the 3-dimensional location, determining the reference altitude of the receiver from the derived altitude.

10 23. (New) A method in a satellite positioning system receiver, comprising:

determining a change in estimated location of two previously estimated locations,

15 at least one of the previously estimated locations based upon a reference altitude;

revising the reference altitude using the change in estimated location and terrain slope information,

determining a new location using the revised reference altitude.